

Applicants: Eric FREEMAN and David H. GELERNTER  
Serial No.: 09/398,611  
Filed : September 17, 1999  
Page 2

an identification generator for generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

Ad Cont. a stream generator: (1) for including each data unit in a persistent main stream, the main stream arranged according to the respective timestamp in the associated chronological indicator; (2) for selecting data units only from the main stream for inclusion in at least one substream, the data units in each substream arranged according to the respective timestamp in the associated chronological indicator; and (3) for combining at least two streams into a merged stream such that the data units are arranged in the merged stream according to the respective timestamp in the associated chronological indicator. h

h 14. (New) A computer system which organizes each data unit received by or generated by the computer system comprising:

an identification generator for generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

a stream generator for: (1) including each data unit in a persistent main stream, the main stream arranged according to the respective timestamp in the associated chronological indicator; and (2) for selecting data units only from the main stream for inclusion in at least one substream, the data units in each substream arranged according to the respective timestamp in the associated chronological indicator; and

an envelope generator for generating a data unit including the substream. h

h 15. (New) A first computer system which organizes each data unit received by or generated by the first computer system comprising:

an identification generator for generating a chronological indicator comprising a timestamp to associate with, and to

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Applicants: Eric FREEMAN and David H. GELERNTER  
Serial No.: 09/398,611  
Filed : September 17, 1999  
Page 3

identify, each data unit;

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a stream generator for: (1) including each data unit in a persistent main stream, the main stream arranged according to the respective timestamp in the associated chronological indicator; and (2) for selecting data units only from the main stream for inclusion in at least one substream, the data units in each substream arranged according to the respective timestamp in the associated chronological indicator; such that the first computer system provides streams for a second computer system. A

16. (New) A computer system which organizes each data unit received by or generated by the computer system comprising:

an identification generator for generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

a stream generator for: (1) including each data unit in a persistent main stream, the main stream arranged according to the respective timestamp in the associated chronological indicator, and (2) for selecting data units only from the main stream for inclusion in at least one substream, the data units in the substream arranged according to the respective timestamp in the associated chronological indicator; and

a display for presenting representations of a plurality of data units of a stream, each representation comprising a polygon displaying an abbreviated version of the content of the data unit such that each selected representation includes indicia indicating a status of the data unit. A

17. (New) A computer system as in claim 16, wherein the indicia comprises:

a border color for the polygon corresponding to the status of the data unit. A

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Applicants: Eric FREEMAN and David H. GELERNTER  
Serial No.: 09/398,611  
Filed : September 17, 1999  
Page 4

h18. (New) A computer system as in claim 16, wherein the display further comprises:

a density indicator indicating by an intensity of color a relative number of data units having a timestamp within a range of times. h

h19. (New) A computer system which organizes each data unit received by or generated by the computer system comprising:

an identification generator for generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

a stream generator for: (1) including each data unit in a persistent main stream, the main stream arranged according to the respective timestamp in the associated chronological indicator, and (2) for selecting data units only from the main stream for inclusion in at least one substream, the data units in the substream arranged according to the respective timestamp in the associated chronological indicator; and

a display for presenting representations of a plurality of substreams, each representation comprising a polygon displaying an abbreviated version of the content of the substream, such that the selected representations are embedded to allow direct access to the respective substream. h

h20. (New) A computer system which organizes each data unit received by or generated by the computer system comprising:

an identification generator for generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

a stream generator for: (1) including each data unit in a persistent main stream, the main stream arranged according to the respective timestamp in the associated chronological indicator, and (2) for selecting data units only from the main stream for inclusion in at least one substream, the data units in the

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Applicants: Eric FREEMAN and David H. GELERENTER  
Serial No.: 09/398,611  
Filed : September 17, 1999  
Page 5

substream arranged according to the respective timestamp in the associated chronological indicator; and

a display for presenting representations of a plurality of data units of a stream arranged in a first chronological order, each representation displaying an abbreviated version of the content of the data unit; and

a reverser for causing the display to present the representations in a reverse chronological order. *H*

*Ad*  
*Ent* *H* 21. (New) A method which organizes each data unit received by or generated by a computer system comprising the steps of:

generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

generating a persistent main stream arranged according to the respective timestamp in the associated chronological indicator;

selecting data units only from the main stream for inclusion in at least one substream, the data units in each substream arranged according to the respective timestamp in the associated chronological indicator; and

combining at least two streams into a merged stream such that the data units are arranged in the merged stream according to the respective timestamp in the associated chronological indicator. *H*

*H* 22. (New) A method which organizes each data unit received by or generated by a computer system comprising the steps of:

generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

generating a persistent main stream arranged according to the respective timestamp in the associated chronological indicator;

selecting data units only from the main stream for inclusion

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Applicants: Eric FREEMAN and David H. GELERNTER  
Serial No.: 09/398,611  
Filed : September 17, 1999  
Page 6

in at least one substream, the data units in each substream arranged according to the respective timestamp in the associated chronological indicator; and

generating a data unit including the substream.-A

23. (New) A method which organizes each data unit received by or generated by a first computer system comprising the steps of:

generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

generating a persistent main stream arranged according to the respective timestamp in the associated chronological indicator;

selecting data units only from the main stream for inclusion in at least one substream, the data units in each substream arranged according to the respective timestamp in the associated chronological indicator; and

providing streams for a second computer system. A

1424. (New) A method which organizes each data unit received by or generated by a computer system comprising the steps of:

generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

generating a persistent main stream arranged according to the respective timestamp in the associated chronological indicator;

selecting data units only from the main stream for inclusion in at least one substream, the data units in each substream arranged according to the respective timestamp in the associated chronological indicator; and

displaying representations of a plurality of data units of a stream, each representation comprising a polygon displaying an abbreviated version of the content of the data unit such that

Applicants: Eric FREEMAN and David H. GELERNTER  
Serial No.: 09/398,611  
Filed : September 17, 1999  
Page 7

each selected representation includes indicia indicating a status of the data unit. *h*

*A2*  
*ACM*  
*h* 25. (New) A computer system as in claim 24, further comprising the step of:

indicating by an intensity of color in an indicator a relative number of data units having a timestamp within a range of times. *h*

*h* 26. (New) A method which organizes each data unit received by or generated by a computer system comprising the steps of:

generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

generating a persistent main stream arranged according to the respective timestamp in the associated chronological indicator;

selecting data units only from the main stream for inclusion in at least one substream, the data units in each substream arranged according to the respective timestamp in the associated chronological indicator; and

presenting representations of a plurality of substreams; each representation comprising a polygon displaying an abbreviated version of the content of the substream, the selected representations being embedded in a display to allow direct access to the respective substream. *h*

*h* 27. (New) A method which organizes each data unit received by or generated by a computer system comprising the steps of:

generating a chronological indicator comprising a timestamp to associate with, and to identify, each data unit;

generating a persistent main stream arranged according to the respective timestamp in the associated chronological indicator;

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Applicants: Eric FREEMAN and David H. GELERENTER  
Serial No.: 09/398,611  
Filed : September 17, 1999  
Page 8

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selecting data units only from the main stream for inclusion  
in at least one substream, the data units in each substream  
arranged according to the respective timestamp in the associated  
chronological indicator; and

presenting representations of a plurality of data units of  
a stream arranged in a first chronological order, each  
representation displaying an abbreviated version of the content  
of the data unit; and

presenting the representations in a reverse chronological  
order. H

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